We claim:

1. A method for aligning first and second sets of wide-bandwidth, high resolution data at a low resolution, the method comprising:

5   computing a magnitude-only spectrogram for each of the sets of high resolution data, using a spectrogram slice length that is appropriate for the stationarity characteristics of the sets of high resolution data and a spectrogram step size that is appropriate for the
10   quantization period of the final alignment;

computing a one-dimensional cross-correlation of the magnitude-only spectrograms for the first and second sets of data; and

selecting an alignment of the first and second sets
15   of data based on the cross-correlation.

2. A method as in Claim 1, wherein the spectrogram slice length and step size are 1/29.97 sec.

3. A method as in Claim 1, wherein the step of computing a one-dimensional cross-correlation further
20 comprises performing a FFT-based one-dimensional convolution method.

4. A method for selecting for cross-correlation a distinctive audio segment from a set of audio data, comprising the steps of:
25   computing the audio energy in a first time window corresponding to a first audio segment;

computing the audio energy in a second time window corresponding to a second audio segment that includes the first audio segment;
30   determining whether the audio energy in the first time window exceeds a specified threshold; and

determining whether the variance of audio energy in the second time window exceeds a specified threshold, wherein the first audio segment is selected as a distinctive audio segment if the first and second thresholds are exceeded.